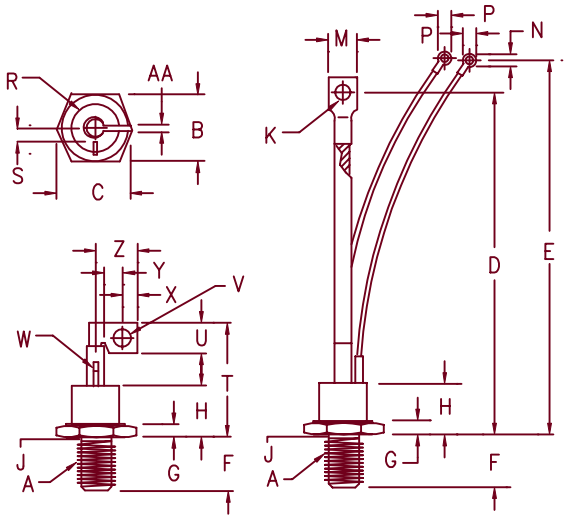
查询150C供应商

Silicon Controlled Rectifier
Series 150C



TO-209AB (TO93)

Notes:
1. 3/4-16 UNF-3A
2. Full thread within 2 1/2 threads
3. For insulated cathode lead, add suffix "IL" to catalog number

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	---	---	---	---	1
B	1.237	1.243	31.42	31.57	
C	1.350	1.360	34.29	34.54	
D	7.428	7.671	188.67	194.84	
E	7.382	8.100	187.50	205.74	
F	1.047	1.077	26.59	27.36	
G	.365	.385	9.27	9.78	
H	---	1.383	---	35.13	
J	.660	.749	16.76	19.02	2
K	.338	.348	8.59	8.84	Dia.
M	.625	.687	15.88	17.45	
N	.140	.150	3.56	3.81	
P	---	.295	---	7.49	
R	---	1.125	---	28.56	Dia.
S	.295	.305	7.49	7.75	
T	---	2.550	---	64.77	
U	.620	.630	15.75	16.00	
V	.276	.286	7.01	7.26	Dia.
W	.065	.075	1.65	1.91	Dia.
X	.245	.255	6.22	6.48	
Y	.243	---	6.17	---	
Z	.770	.790	19.56	20.07	
AA	.120	.130	3.05	3.30	

Microsemi Catalog Number	Forward & Reverse Repetitive Blocking	Reverse Transient Blocking
150C60B	600	700
150C80B	800	900
150C100B	1000	1100
150C120B	1200	1300

Add suffix "F" for flag lead
To specify dv/dt higher than 200V/usec., contact factory.

- High dv/dt-200 V/usec.
- 3000 Amperes surge current capability
- Low forward on-state voltage
- Primarily for line commutated converters
- Economical for general purpose phase control applications

Electrical Characteristics

Max. RMS on-state current	$I_{T(RMS)}$	235 Amps	T_C = 73°C
Max. average on-state cur.	$I_{T(AV)}$	150 Amps	T_C = 73°C
Max. peak on-state voltage	V_{TM}	1.6 Volts	I_{TM} = 500 A(peak)
Max. holding current	I_H	200 mA	
Max. peak one cycle surge current	I_{TSM}	3000A	T_C = 73°C, 60Hz
Max. I^2t capability for fusing	I^2t	37,000A^2S	t = 8.3 ms

Thermal and Mechanical Characteristics

Operating junction temp range	T_J	-65°C to 125°C
Storage temperature range	T_{STG}	-65°C to 150°C
Maximum thermal resistance	$R_{\theta JC}$	0.20°C/W Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	0.40°C/W Case to sink
Mounting torque		250-300 inch pounds
Weight		7.4 ounces (211.1 grams) typical

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10-6-00 Rev. 1

150C

Switching

Critical rate of rise of on-state current (note 1)	di/dt	100A/usec.	T_J = 125°C
Typical delay time (note 1)	t_d	3.0 usec.	
Typical circuit commuted turn-off time (note 2)	t_q	100 usec.	T_J = 125°C

Note 1: I_{TM} = 100A, V_D = V_{DRM}, V_{GT} = 12V open circuit, 20 ohm-0.1 usec rise time
Note 2: I_{TM} = 100A, di/dt = 5A/usec, V_R during turn-off internal = 50V min, reapplied dv/dt = 20V/usec., linear to rated V_{DRM}, V_{GT} = 0V

Triggering

Max. gate voltage to trigger	V_{GT}	3.0V	T_J = 25°C
Max. nontriggering gate voltage	V_{GD}	0.25V	T_J = 125°C
Max. gate current to trigger	I_{GT}	150mA	T_J = 25°C
Max. peak gate power	P_{GM}	10W	
Average gate power	$P_{G(AV)}$	2.0W	t_p = 10 usec.
Max. peak gate current	I_{GM}	2.0A	
Max. peak gate voltage (forward)	V_{GM}	10V	
Max. peak gate voltage (reverse)	V_{GM}	5.0V	

Blocking

Max. leakage current	I_{DRM}	20mA	T_J =125°C & V_{DRM}
Max. reverse leakage	I_{RRM}	20mA	T_J =125°C & V_{RRM}
Critical rate of rise of off-state voltage	dv/dt	200V/usec.	T_J =125°C

150C

Figure 1
Typical Forward On-State Characteristics

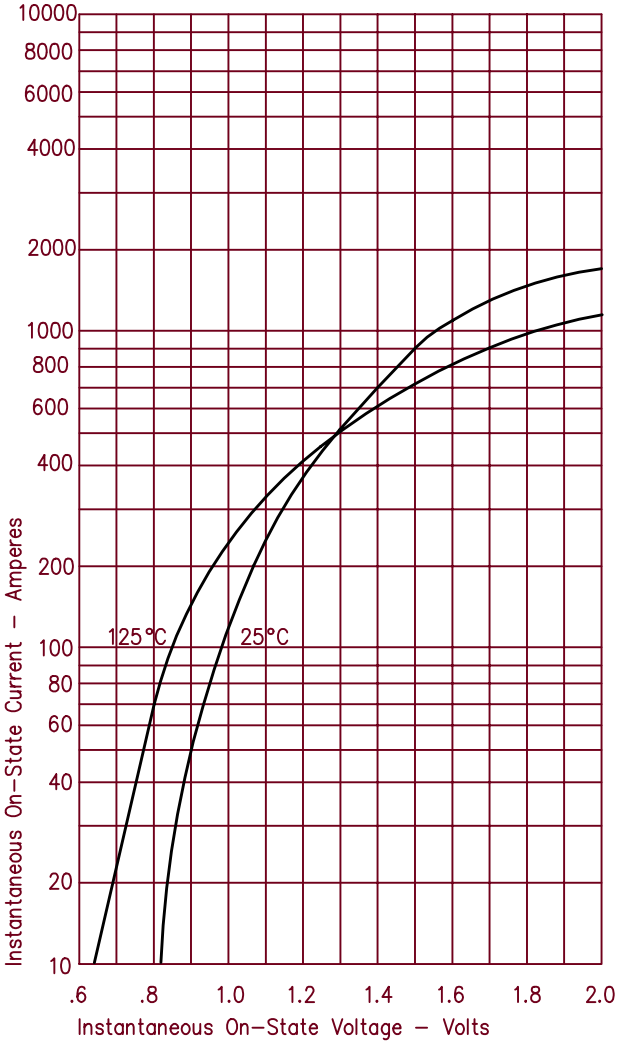

Figure 3
Maximum Power Dissipation

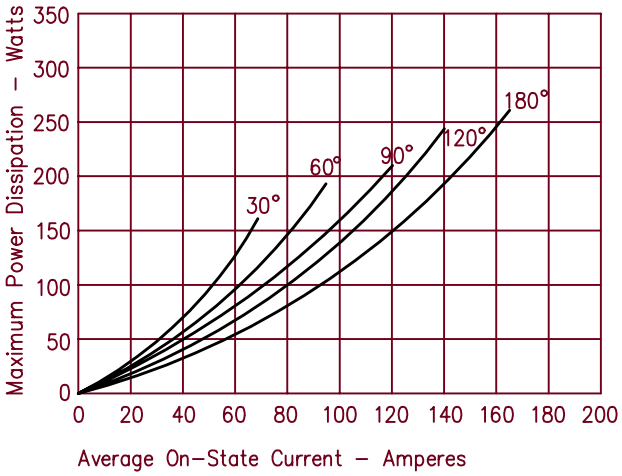

Figure 4
Transient Thermal Impedance

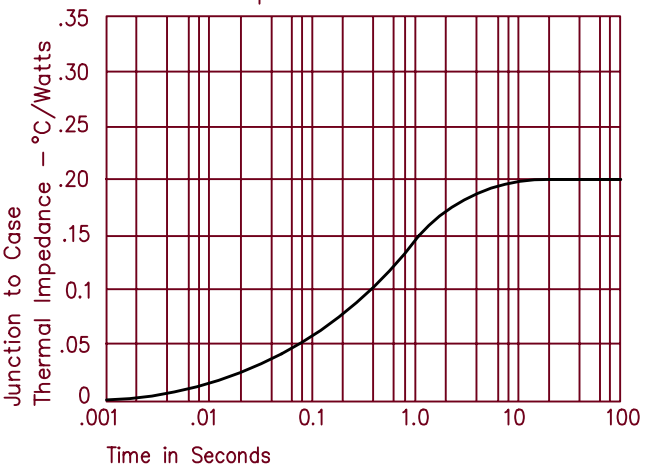

Figure 2
Forward Current Derating

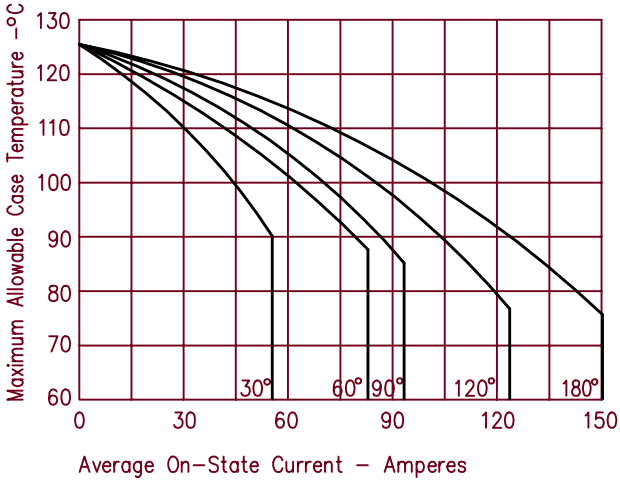

Figure 5
Maximum Nonrepetitive Surge Current